

**REMARKS**

Claims 1-23 are pending in this application. An amendment is proposed canceling claims 9, 10 and 16-23 without prejudice or disclaimer, and amending claims 1 and 3. Upon entry of this amendment, claims 1-8 and 11-15 will be pending. The Applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated November 26, 2008.

**Claims 1, 4, 5 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshi et al. (Abstract JP8186235) in view of Mirkarimi et al. '094.**

**Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshi et al. (Abstract JP8186235) in view of Mirkarimi et al. '094, and further in view of Adkisson et al. '202.**

**Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshi et al. (Abstract JP8186235) in view of Mirkarimi et al. '094, and further in view of Kim et al. '371.**

**Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshi et al. (Abstract JP8186235) in view of Mirkarimi et al. '094, and further in view of Greenwald et al. '026.**

**Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshi et al. (Abstract JP8186235) in view of Mirkarimi et al. '094, and further in view of Yamawaki et al. '774.**

**Claims 13-18 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshi et al. (Abstract JP8186235) in view of Mirkarimi et al. '094, and further in view of Li '254.**

**Claims 19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takeshi et al. (Abstract JP8186235) in view of Mirkarimi et al. '094, further in view of Li '254, and further in view of Lee et al. '705.**

The rejections of claims 9, 10 and 16-23 are moot in view of the cancellation of these claims without prejudice or disclaimer.

The rejections of claims 1, 2, 4-8, and 11-15 are overcome by the amendment to base claim 1. Claim 1 has been amended to delete the recitation that the thin film layer can be “a ferroelectric polycrystalline thin film containing Pb and oriented parallel with the plane (111) in parallel with the surface of the substrate.” The thin film in claim 1 is therefore limited to “a ferroelectric single crystalline thin film containing Pb and having a plane (111) in parallel with the surface of the substrate.”

Applicant argued in the Response dated September 22, 2008, that the “ferroelectric single crystalline thin film” layer in claim 1 is a single crystal having no grain boundary. In contrast, Takeshi et al. does not disclose use of a film of a “single” crystal. None of the cited references provides this limitation of claim 1, and claims 1, 2, 4-8, and 11-15 are therefore not obvious over the cited references, taken separately or in combination.

**Claim 3 is objected to as being dependent upon a rejected base claim.**

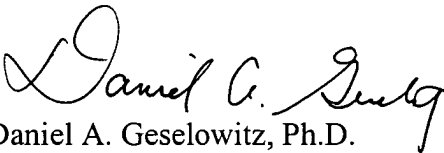
Reconsideration of the objection to claim 3 is respectfully requested in view of the amendment to base claim 1. Claim 3 has also been amended for consistency with claim 1 to delete the recitation that the thin film layer can be "a ferroelectric polycrystalline thin film containing Pb and oriented parallel with the plane (111) in parallel with the surface of the substrate." Applicant has argued above that base claim 1 is not obvious over the cited references, and claim 3 is therefore also not obvious over these references.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the Applicants' undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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